



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/765,881

01/29/2004

Toshiyuki Suzuki

2635-200

2291

23117 7590 09/19/2008
NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

OLSEN, KAJ K

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

09/19/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9-4-2008 have been fully considered but they are not persuasive. Applicant urges that Suzuki '940 fails to disclose, teach or suggest the limitation beginning "sets a limit current region within a voltage level range...". However, as the examiner discussed in the previous 6/9/2008 office action, this limitation is drawn to the manner of how the applicant chooses the applied voltage line and the manner in which applicant chose its line doesn't further define the line itself or the apparatus using the line. The line shown in fig. 3 of Suzuki '940 would have met the defined line of the claims even if the reason for utilizing Suzuki's particular applied voltage line might have been different. That much is evident from in the marked-up fig. 5 of the present invention where the examiner superimposed the line chosen by the prior art method onto the V-I curve of the present invention (see p. 4 of the 6/9/2008 office action). The line chosen by Suzuki '940 would have fallen in the range desired by the present invention. Moreover, the examiner has rejected the claims in the alternative over the further teaching of JP '388, which shows that the applied voltage line should be altered in view of the narrower limit current range for rich gases ($\lambda = 0.8$) versus lean gases ($\lambda > 1.5$), which is analogous to what the present invention recognized.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAJ K. OLSEN whose telephone number is (571)272-1344. The examiner can normally be reached on M-F 8:00-4:30.

Art Unit: 1795

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kaj K Olsen/
Primary Examiner, Art Unit 1795
September 20, 2008